

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau(43) International Publication Date  
18 March 2004 (18.03.2004)

PCT

(10) International Publication Number  
WO 2004/023123 A1(51) International Patent Classification<sup>7</sup>: G01N 23/04,  
G21K 1/02, A61B 6/06, 6/03(21) International Application Number:  
PCT/IL2002/000729(22) International Filing Date:  
4 September 2002 (04.09.2002)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): PHILIPS  
MEDICAL SYSTEMS TECHNOLOGIES LTD.  
[IL/IL]; P. O. BOX 325, 31004 Haifa (IL).

(72) Inventor; and

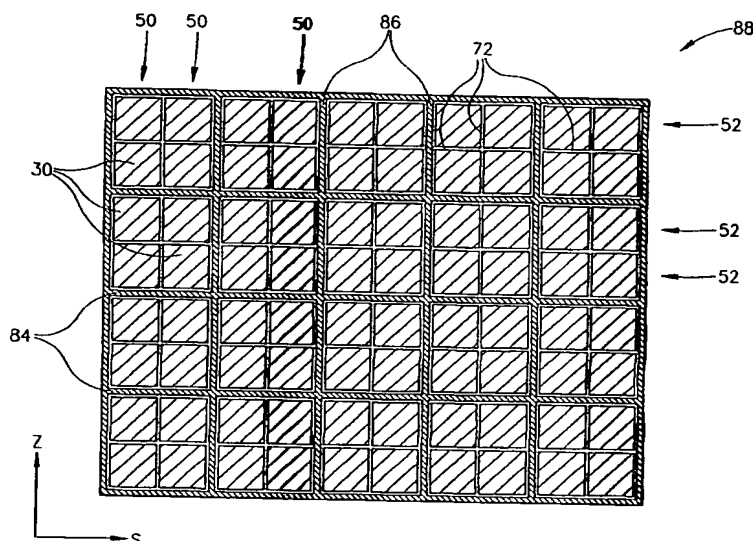
(75) Inventor/Applicant (for US only): MALAMUD, Gabriel  
[IL/IL]; 5 Ha'Einav Street, 30500 Benyamina (IL).(74) Agents: FENSTER, Paul et al.; Fenster & Company, In-  
tellectual Property 2002 LTD., P. O. BOX 10256, 49002  
Petach Tikva (IL).(81) Designated States (national): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,  
SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK,  
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: ANTI-SCATTERING X-RAY SHIELDING FOR CT SCANNERS



(57) ~~Abstract~~: A CT scanner comprising a stator and a rotor having an axis of rotation mounted to the stator so that the rotor is rotatable about the axis of rotation comprising: an X-ray source mounted to the rotor, said X-ray source having a focal spot from which X-rays emanate; an X-ray detector array comprising a matrix of rows and columns of X-ray detectors; anti-scattering (AS) material for absorbing X-rays positioned between columns of the X-ray detectors; and anti-scattering (AS) material for absorbing X-rays positioned between rows of the X-ray detectors, whereby the AS material is located between every other row and/or column of detectors, respectively. Furthermore, the thickness and/or height of the foils between rows may be different from the thickness and/or height of the foils between columns.